



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,599	04/08/2004	Michael Nordlund	200206827-2	1560

7590 01/10/2007
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
----------	--------------

3653

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/821,599

Applicant(s)

NORDLUND ET AL.

Examiner

Thomas A. Morrison

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 2,6-9 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/27/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f)..
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the election of species requirement in the reply filed on 10/27/2006 is acknowledged. The traversal is on the ground(s) that FIGS. 1 and 2 do not represent patentably distinct species, and that these two figures are related because FIG. 1 is generic to FIG. 2. This is not found persuasive because FIG. 2 is directed to a printer drive mechanism that requires a gear train, as well as a harmonic drive. At least the harmonic drive of the species shown in FIG. 2 makes this species patentably distinct from the species shown in FIG. 1, which does not require such harmonic drive.

Applicant indicated that claims 1-5 and 10-13 read on FIG. 1. However, the recited clutch gear in claim 2 appears to only be directed to the species shown in FIG.

2. As such, claim 2 has been withdrawn as being directed to a non-elected species. In other words, claims 1, 3-5 and 10-13 have been examined, and claims 2, 6-9 and 14 have been withdrawn as being directed to a non-elected species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claim 13 is objected to because of the following informalities: (1) "the first and second speed is equal" in line 1 of claim 13 should be -- the first and second speeds are equal --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is unclear what is meant by the recitation, "a drive transmission for coupling **to the drive roller to the drive motor** for turning the drive roller at different speeds". (emphasis added).

Claim 1 recites the limitation "the range of turning speeds" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 1, it is unclear what is meant by the recitation "a speed selector disposed in the drive transmission for selecting the **range of turning speeds** of the drive roller **at a first speed** for feeding the media sheet to the printing area and **at a second speed** for feeding the media sheet with precision for image printing while in the printing area". How can a range be at a first speed and/or at a second speed. Usually, a range is defined between first and second speeds.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: (1) the structure of the drive roller, which allows precision media feeding at a second speed. There is

Art Unit: 3653

insufficient structure recited in claim 4 to understand how changing the speed of a drive roller allows a media sheet to be fed more precisely.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-5 and 10-12, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by European Publication No. 0257527.

Regarding claim 1, Figs. 1-6 and claim 1 of European Publication No. 0257527 disclose a printer drive mechanism, comprising:

a drive motor (6);

a drive roller (1) for feeding a media sheet towards and through an image printing area (see e.g., col. 6, lines 22-27);

a drive transmission (Fig. 1) for coupling to the drive roller (1) to the drive motor (6) for turning the drive roller (1) at different speeds; and

a speed selector (see e.g., claim 1) disposed in the drive transmission (Fig. 1) for selecting the range of turning speeds of the drive roller (1) at a first speed for feeding the media sheet to the printing area (col. 6, lines 22-27) and at a second speed for feeding the media sheet with precision for image printing while in the printing area. See

e.g., English Abstract and claim 1 of European Publication No. 0257527 for an explanation of the different speeds.

Regarding claim 3, the English Abstract and claim 1 of European Publication No. 0257527 disclose that the first speed is faster than the second speed.

Regarding claim 4, as best understood, the English Abstract and claim 1 of European Publication No. 0257527 disclose that the first speed is characterized by rapid media sheet feeding with less precision and the second speed is characterized by precision media sheet feeding at a speed slower than the first speed. Moreover, in the recitation “first speed is **characterized by rapid media sheet feeding with less precision** and the second speed is **characterized by precision media sheet feeding** at a speed slower than the first speed”, the bolded portion of this recitation has not been given patentable weight in view of MPEP, section 2114. Specifically, MPEP, section 2114 states that, “While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function.” See MPEP, section 2114.

Regarding claim 5, Figs. 1-5 and claim 1 of European Publication No. 0257527 disclose that the drive transmission (Fig. 1) comprises a low-reduction (including 9b and 11b) and a high-reduction (including 9a and 11a) mechanism, and the speed selector (see e.g., claim 1) selectively engages the drive roller (1) with the drive motor (6) through one of the low-reduction and high-reduction transmission mechanisms such that the drive roller (1) feeds the media sheet at the first or second speed respectively.

Regarding claim 10, Figs. 1-5, the English Abstract and claim 1 of European Publication No. 0257527 disclose a process for feeding a media sheet in a printer, comprising the steps of:

feeding the media sheet (not shown) at a first speed (e.g., fast) towards a print zone (see e.g., col. 6, lines 22-27) in the printer before the media sheet reaches the print zone; and

feeding the media sheet at a second speed (e.g., slow) through the print zone where images are printed onto the media sheet. See e.g., the English Abstract and claim 1 of European Patent Publication No. 0257527 for an explanation of the different speeds.

Regarding claim 11, the English Abstract and claim 1 of European Publication No. 0257527 disclose that the first speed is higher than the second speed.

Regarding claim 12, the English Abstract of European Publication No. 0257527 discloses the step of feeding the media sheet out of the print zone (e.g., ejecting) to an output area at a third speed.

5. Claims 10, 12 and 13, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,742,318 (Miyauchi et al.).

Regarding claim 10, Figs. 22-23 and column 2, line 33 to column 3, line 5 disclose a process for feeding a media sheet in a printer, comprising the steps of:

feeding the media sheet (S) at a first speed (e.g., slow via rollers 43) towards a print zone (42) in the printer before the media sheet (S) reaches the print zone; and

feeding the media sheet (S) at a second speed (e.g., slow via rollers 43) through the print zone where images are printed onto the media sheet. It is noted that the first and second speeds can be the same and meet the limitations of claim 10.

Regarding claim 12, column 2, lines 52-54 and column 2, line 66 to column 3, line 3 disclose the step of feeding the media sheet out of the print zone (42) to an output area at a third speed (via rollers 45).

Regarding claim 13, Figs. 22-23 disclose that the first and second speed is equal.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

01/02/2007



PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600